IMPORTANT INFORMATION

VOLTstack® Power States

The VOLTstack® power station has three power states:

Power On - All systems on with AC output

For full power output & usage - Green Output Lights ON

Standby - Systems on with NO AC output

For charging and between operations - Battery Monitor lights ON

Off - Zero power state with NO AC output

For shipping and long term storage - NO lights on, including Master Battery On/Off



QUICK GUIDE

VOLTstack® 2k & 5k

Unit images on pg. 2

TO TURN POWER ON

From Off to Standby

- 1. Lift the panel on the Master Battery On/Off.
- 2. Press the button(s) beneath and the blue button lights will illuminate.

From Standby to Power On

- Press the On/Off Button located on front panel.
 The button light will illuminate.
- 2. You will hear two beeps and after 6 seconds the green Output Lights will illuminate. You now have power!

TO TURN POWER OFF

From Power On to Standby

- 1. Unplug or turn off devices before shutting off the unit.
- 2. Press the On/Off Button on the front panel. This will cut the power to the receptacles and all lights will turn off.

From Standby to Off

- 1. Lift the panel(s) on the Master Battery On/Off.
- 2. Press the button(s) beneath and the blue button lights will turn off.

TO CHARGE THE UNIT

- 1. From Standby or Power On states, ensure the Charging Breakers are ON.
- 2. Plug the extension cord's 'female' end into the Charging Ports.
- 3. The orange Charging Lights will illuminate indicating there is charge power coming in & the Battery Monitor will indicate the unit is charging.

NB: 'Charging' is defined by net power consumption.

4. Charging is complete when full bars are shown on the Battery Monitor.

Charging from Solar

 To charge using solar – plug the solar cable from the SUNstack™ solar kit into the Solar Charging Ports.

NB: Using solar panels, solar cables or solar connectors not supplied by Portable Electric may cause permanent damage to your VOLTstack® and/or void your warranty. Use only approved SUNstack™ equipment from Portable Electric.

Troubleshooting Errors

1. IMPORTANT - Initial Troubleshooting Procedure:

- Ensure all breakers are in the ON position.
- Perform a Power Cycle:
 - From Standby state, turn the unit to Off state (see pg. 1).
 - Wait 10 seconds.
 - Turn the unit back to **Standby** and then to **Power On**.

2. There is no power at the Output Receptacles.

- See Step 1.
- If there is still no power, please call the service provider.

3. The green Output Lights do not illuminate.

- Complete Step 1, then check for power at the Output Receptacle.
- If there is power, it is an issue with the Output Lights.
 The unit is still operational. Please call the service provider.

4. The unit is not charging.

- See Step 1.
- If unit still does not charge, see Step 5.

5. The orange Charging Lights do not illuminate.

- Check input power source and connection.
- If the unit still does not charge, please call the service provider.

6. The unit's charge does not last as long as normal.

- Ensure that the blue Master Battery On/Off lights are illuminated.
- Charge the unit back to full.
- If the unit's charge still does not last, please call the service provider.

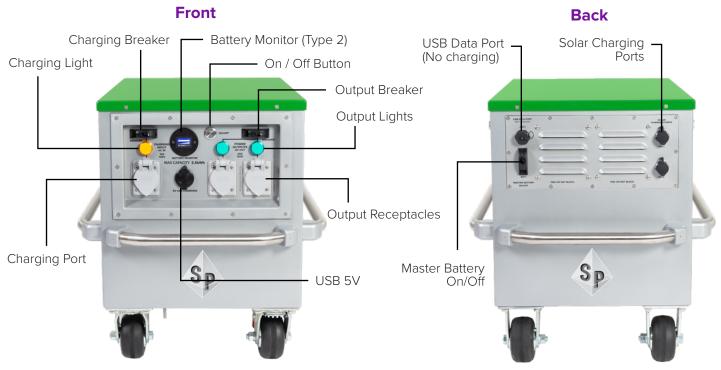
Understanding the VOLTstack® Battery Monitor

Depending on the unit version, the VOLTstack will have **one** of two monitor types. Please see the Battery Monitor Quick Guide for more information.

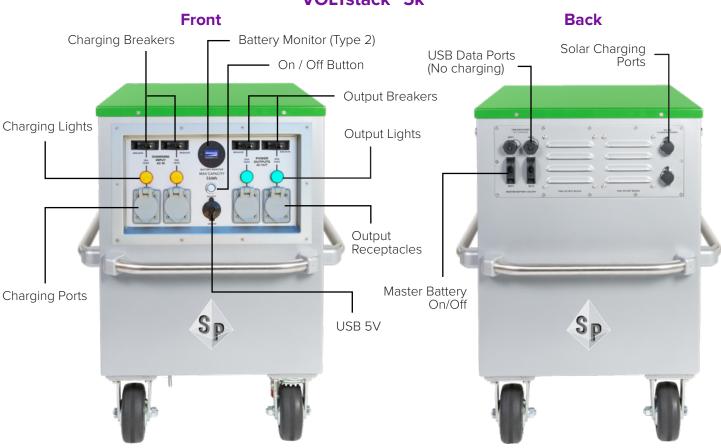
Storing the VOLTstack

- 1. Maximize battery life by turning the unit off when not in use.
- 2. Turn the unit into Standby, and then into Off power state.

VOLTstack® 2k



VOLTstack® 5k





BATTERY MONITOR QUICK GUIDE

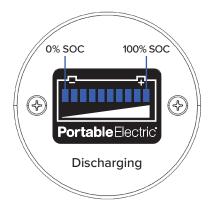
Type 1 & Type 2

Type 1 Battery Monitor

The Type 1 Battery Monitor has ten blue LEDs. Full illumination of the ten LED's indicates 100% State of Charge.

Discharging

The Battery Monitor will show the State of Charge when discharging.



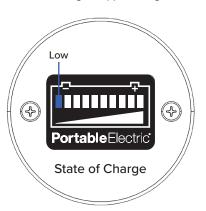
Charging

The right most blue LED will blink.



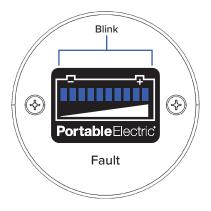
State of Charge Low

The last remaining LED will blink indicating the State of Charge is approaching zero.



Fault Warning

All of the LEDs will blink. This can indicate an overload fault warning, or over temperature fault warning.



Connection Error

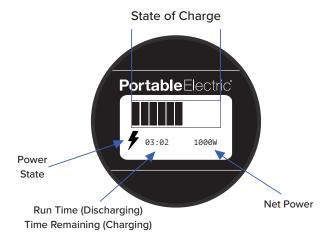
A single blue LED will move continually from left to right and back again. This indicates a connection error in the Battery Monitor.



SHATTERED PRISM

Type 2 Battery Monitor

The Type 2 Battery Monitor has an LCD screen which displays the State of Charge, Power State, discharge Run Time, charge Time Remaining, and Net Power of the VOLTstack.

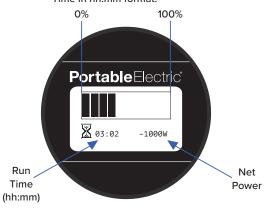


- The State of Charge is divided into 10 intervals based on 0-100% State of Charge.
- The Run Time and Time Remaining are based on average Net Power, and will
 update as the Net Power changes.
- The loading screens display critical information and cannot be skipped. Loading Screen 1 and 2 are for maintenance, and Loading Screen 3 displays the historical usage of the VOLTstack.

Power State	Discharging	Charging	Idle
Symbol	X	#	IDLE

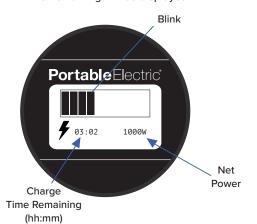
Discharging

The Battery Monitor will show the State of Charge, as well as the estimated Run Time in hh:mm format.



Charging

The right most interval will blink, and the charging symbol with estimated charge Time Remaining will be displayed.



Idle

The Battery Monitor will display Idle at a Net Power of 0.



State of Charge Low

The last remaining State of Charge interval will blink indicating the State of Charge is approaching zero. The Run Time will indicate a capacity of less than 15 minutes remaining.

Fault Warning

All of the State of Charge intervals will blink. This can indicate an overload fault warning, or over temperature fault warning.

Loading Screens

Loading Screen 3: The total usage of the VOLTstack can be calculated by adding the charging and discharging kWh used. The difference between the two values will indicate time spent at Idle.

